



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,237	03/03/2004	Manabu Fujita	17517	4668
23389 7590 02/12/2008 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530				
EXAMINER				
SMITH, PHILIP ROBERT				
ART UNIT		PAPER NUMBER		
3739				
MAIL DATE		DELIVERY MODE		
02/12/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/792,237

Applicant(s)

FUJITA ET AL.

Examiner

PHILIP R. SMITH

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-849)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- [01] A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/19/2007 has been entered.

Claim Rejections - 35 U.S.C. 112, Paragraph Two

- [02] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [03] Claims 7-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [04] With regard to claim 7:
- [04a] Applicant recites "a detecting device which detects a communication state including a transmitting state for transmitting to, and a receiving from [sic], the extracorporeal device". It appears that the following can be deduced from the specification with regard to the "detecting device": that the "detecting device" composes the "extracorporeal device", and that it detects a communication state of transmitting to, or receiving from, the "capsular in-body unit". The following is recommended for clarity:

wherein the extracorporeal device comprises:

a detecting device which detects a communication state, wherein the communication state includes a transmitting state for transmitting to the in-body unit, and a receiving state for receiving from the in-body unit.

- [04b] As indicated above, it is critical that those elements which compose the "extracorporeal device" be identified as such. MPEP §2172.01 states that "a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention." See *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); *In re Collier*, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). The following is recommended for clarity: "wherein the extracorporeal device comprises: a communication device...; a switching device...; and a detecting device...; wherein..." etc.
- [05] With regard to claims 8-18: The indefiniteness identified in paragraph [06a] above with regard to claim 7 apply equally to claims 8-18, which also recite a "detecting device". The indefiniteness identified in paragraph [06b] above with regard to claim 7 apply equally to claims 8-18, which also recite a "switching device" and a "detecting device" apart from the "extracorporeal device".
- [06] With regard to claim 8: Applicant recites a "communication direction", whereas the detecting device detects a "communication state". Furthermore Applicant recites that "the extracorporeal device operates the switching device". The scope of this is unclear. Furthermore, Applicant recites that "the antenna selecting device performs the operation..." The "operation" lacks antecedent basis in the claim. The following is recommended for clarity and conciseness:

a detecting device which detects a communication state, wherein the communication state includes a transmitting state for transmitting to the in-body unit, and a receiving state for receiving from the in-body unit...

...

wherein the switching device switches the antennas at a switching timing which is synchronized with a communication state switching detected by the detecting device, and the antenna selecting device selects the preferable antenna within a time interval set by a timer.

- [07] With regard to claim 9: Applicant recites that "the detecting device performs the operation". The "operation" lacks antecedent basis in the claim. Furthermore, Applicant recites that the antenna is switched "at a switching timing synchronized with switching of communication direction" and also "when a communication state is deteriorated". It appears from the specification that a new antenna is *selected* when a communication state is deteriorated and but that it is actually *switched* in synchronization with a communication state switching detected by the detecting device. As written, it is not clear under what conditions the antenna is switched.
- [08] With regard to claims 10-12, 15-18: Applicant recites a "communication direction", whereas the detecting device detects a "communication state". Furthermore, Applicant recites that "the extracorporeal device operates the switching device". As noted above with regard to claim 8, the scope of this is unclear.
- [09] With regard to claim 13: Applicant recites a "communication direction", whereas the detecting device detects a "communication state". Furthermore Applicant recites that "the extracorporeal device operates the switching device". Furthermore, Applicant recites that "the antenna selecting device performs the operation..." The "operation" lacks antecedent basis in the claim. As noted above with regard to claim 8, the scope of this is unclear.
- [10] With regard to claim 14: Applicant recites a "communication direction", whereas the detecting device detects a "communication state". Furthermore, Applicant recites that "the extracorporeal device operates the switching device". As noted above with regard to claim 8, the scope of this is unclear. Furthermore, Applicant recites that "the detecting device performs the operation". As noted above with regard to claims 9, the "operation" lacks antecedent basis in the claim.

Claim Rejections - 35 USC § 102

- [11] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [12] Claims 7-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Fujita (2003/0085994).
- [13] Fujita discloses a capsular medical system comprising:
- [13a] a capsular in-body unit ("capsule type endoscope 3," [0074]) having a radio communication device ("antenna 23," [0074]) which is inserted or swallowed to be introduced to the body cavity;
 - [13b] an extracorporeal device ("external unit 5," [0070]) having a communication device for communication with the in-body unit, which is arranged outside the human body;
 - [13c] at least two antennas ("multiple antennas 11a to 11d," [0070]) which are arranged near the body surface to communicate data to the in-body unit connected to the extracorporeal device;
 - [13d] a switching device ("antenna switch 45," [0071]) which switches the antennas;
 - [13e] a detecting device ("receiving circuit 33," [0075]) which detects a communication state including a transmitting state and a receiving state;
- [14] With regard to claim 7: the extracorporeal device disclosed by Fujita synchronizes timing for switching the antenna with timing for switching communication direction of the receiving and transmitting in accordance with a detected communication state of one of receiving and transmitting. For example, Fujita discloses transmitting strength data via sequentially switched antennas "11a, 11b,..., 11d" in [0073] and then receiving strength data via sequentially switched antennas "11a, 11b,..., 11d" in [0075]. At the time when the extracorporeal device stops transmitting via "11d" and

starts receiving via "11a", the antenna switching timing and the communication direction timing are synchronized.

- [15] With regard to claim 8: Fujita discloses that an antenna selecting device ("antenna select circuit" [0075]) performs the operation at the time interval set by a timer ("sequentially selected," [0073]; "repeated at intervals of proper period of time," [0083]).
- [16] With regard to claim 9: Fujita discloses that the detecting device performs the operation at the time interval set by a timer (as noted above) and, when a communication state is deteriorated, the antenna is switched ("the antenna 11i, through which the highest radio wave strength data can be received, must be changed," [0083]).
- [17] With regard to claim 10: Fujita discloses that a number n of antennas whose receiving and transmitting states are detected is less than a number N of all of the attached antennas at a time of antenna switching ([0132]).
- [18] With regard to claim 11: Fujita discloses that the antenna whose receiving and transmitting state is checked is determined based on the antenna which currently receives data ("highest radio wave strength" [0075]).
- [19] With regard to claim 12: Fujita discloses a storing device for storing the receiving and transmitting state ("memory 47," 0072)), wherein, when the receiving strength data is not obtained upon operating the antenna selecting device, the antenna which can communicate data is checked and is selected to ensure the communication ("antenna 11i," as noted above).
- [20] With regard to claim 13: Fujita discloses that the antenna selecting device operates at the time interval set by a timer (as noted above).

- [21] With regard to claim 14: Fujita discloses that the detecting device performs the operation at the time interval set by a timer (as noted above) and, when a communication state is deteriorated, the antenna is switched (as noted above).
- [22] With regard to claim 15: Fujita's invention inherently has a number n of antennas whose receiving and transmitting states are detected being less than a number N of all the attached antennas at the time of antenna switching. (Since "antennas 11i" are "switched sequentially" [0075], this is necessarily the case; where $n=1$ and $N=7$)
- [23] With regard to claim 16: Fujita discloses that the antenna whose receiving and transmitting state is checked is determined based on the antenna which currently receives data ([0074]).
- [24] With regard to claim 17: Fujita discloses that when data on the receiving strength is not obtained upon operating the antenna selecting device, the antenna which can communicate data is checked and is selected to ensure the communication ("antenna 11i," as noted above).
- [25] With regard to claim 18: Fujita discloses that the detecting device selects one of the at least two antennas arranged to communicate data to the in-body unit connected to the extracorporeal device, via the switching device, in response to a detected communication state corresponding to movement of the capsular in-body unit in the body cavity. This is the process described in [0075].

Response to Arguments

- [26] Applicant's arguments filed 11/19/2007 have been fully considered but they are not persuasive.
- [27] Applicant contends that Fujita does not perform sequential switching at a time interval set by a timer. The sequential switching described by Fujita inherently has a certain number of clock cycles between switches. This is a time interval set by a timer.

- [28] Applicant contends that Fujita "fails to distinguish between the claim 9 detecting device and its antenna-selecting device, which are distinct and separate elements." It is maintained that the functions ascribed to the recited detecting device and the recited antenna-selecting device are disclosed by Fujita.
- [29] Applicant contends that Fujita does not include the limitation for use of its memory 47 that "when the receiving strength data is not obtained upon operating the antenna selecting device, the antenna able to communicate data is detected and selected to carry out the communication, and the extracorporeal device operates the switching device at a switching timing synchronized with switching of communication direction of the receiving and transmitting". This limitation, as recited, does not apply to the "storing device", but the "extracorporeal device".

Conclusion

- [30] Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP R. SMITH whose telephone number is (571)272-6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [31] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [32] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

Art Unit: 3739

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the
Electronic Business Center (EBC) at 866-217-9197 (toll-free)

[33]

[34] /Linda C Dvorak/

[35] Supervisory Patent Examiner, Art Unit 3739